


September 30, 1985

TO: File

FROM: James Leatherwood, Reclamation Soils Specialist 

RE: Anaconda Company, Carr Fork Reclamation, ACT/045/004,
Tooele County, Utah

On September 17, 1985, Sue Linner, Lynn Kunzler, Everett Hooper and James Leatherwood of the Division accompanied by Joe Jarvis and Brian Buck of JBR, Randy Gainer of Earth Fax and Wade Hansen of Hazordus Waste, visited the Carr Fork Mine site. The first stop was the area west of the IS & R Smelter site. No reclamation will occur on this area except those areas where soil materials will be borrowed. A concern that the upper soil profile being toxic was indicated. Most heavy metals (cadmium, lead, selenium, etc.) are being tested by paste extract. JBR reasoning is to find how soluble and available these metals are to water transport. The Division has stated that the paste extract method is not a valid methodology for heavy metal analysis. JBR will contact the Division for specific analytical procedures.

The second stop was the Soil Conservation Service (SCS) vegetation terracing plots west of the first stop. Poa pratensis and intermediate crested wheat is successful on the inner terraces plots and not on the outslope of the terraces. Joe Jarvis stated that the SCS feels that the vegetation is successful because the uncontaminated subsoil is exposed on the inner terrace while the contaminated material is pushed to form the outslope of the terrace. Rills, gullies and desert pavement is indicating that high soil erosion has occurred on this site. This site will not be reclaimed further.

The third stop was at the IS & R Smelter site. The area has a poor stand of vegetation and a high rate of soil erosion. There is considerable amount of debris and old cement structures. Brian Buck stated that all high structure walls will be dozed and buried by borrow material. Borrow materials will be from the site directly east of the smelter area. Soils of adequate volume and not toxic will also be used for borrow material at this site. The soil is being analyzed for heavy metal toxicity. All areas found to be toxic will be buried by borrow material. A total borrow material depth of 12 inches will be obtained. Large amounts of free sulfur and pyrite was evident throughout the area (some of this material is stockpiled). The old structures make a highwall against the Dry

Canyon drainage. Plans for this highwall will be to backfill and regrade the area to a stable slope. A hard pan was evident 12 inches deep in an eroded gully.

The fourth stop was a pyrite waste pile located northeast of the IS & R Smelter area. The pyrite is a fine sand in texture, stable with signs of low erosion.

The fifth stop was at the IS & R slag pile. The Department of Health is concerned about cadmium (and other heavy metals) leaching through this material. Saturated paste extract analysis is currently being run. The Pine Canyon drainage runs adjacent to and over the north side of the slag pile. This drainage area has a good growth of riparian vegetation. The Pine Canyon drainage has eroded the alluvial material on the south aspect and the slag material from the north aspect to form a "waterfall" approximately 50 feet in fall. The slag pile has visible signs of slumping at the area of this fall. No topsoil placement will occur on the north aspect due to the high slope. Twelve inches of borrow material will be placed on the top of the slag pile. The borrow material will be from the alluvial fan west of the smelter site.

The sixth stop was the Carr Fork Dam and Tailings area. IS & R tailings are west of this site. The dam had no signs of being in an unstable condition. Twelve inches of borrow material will be placed over the tailings. The borrow material will originate from the alluvial fan south of the tailings area. The IS & R tailings will also have 12 inches of borrow material as top dressing. The borrow area to the south was the seventh and eighth stop. Two soil pits were excavated and sampled for analysis. The soil series in this borrow area consist of a Yeates Hollow gravelly loam (YAD) on a 5 to 15 percent slope. The Yeates series is defined as a clayey-skeletal, montmorillonitic frigid Lithic Argixeroll.